



My Perception is Your Reality

Maximizing Ridership by Improving Transit Vehicle Aesthetics
Featuring Capital District Transportation Authority

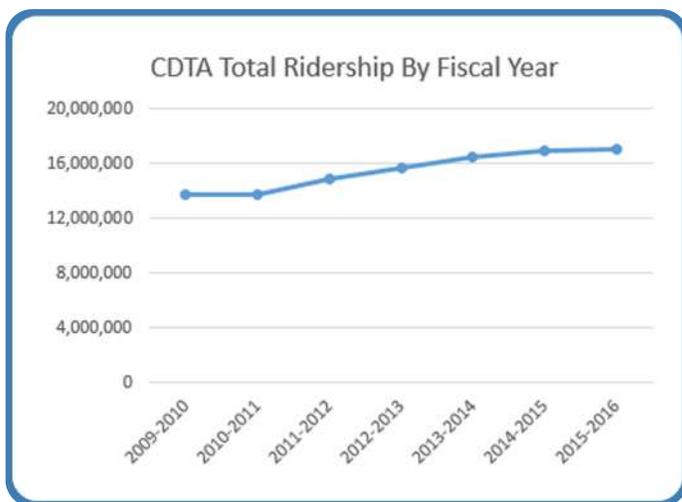


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The Problem with Transit Fleet Aesthetics

Aesthetics are becoming more important to those who are using or plan to use public transportation. The appearance of transit vehicles is critical to maintain and increase ridership in today's fast paced world.

The function value and use value of a transit system is determined by ease, effectiveness, comfort, and aesthetics¹. Aesthetics is defined as, 'Simply, does the product appeal to users? Is it visually and tactilely appealing? How does using the system affect all five senses?'



Here are ways you can test your own transit vehicles' aesthetics:

- Are vehicles clean, outside and inside?
- Do the vehicles' temperature, fabrics, and hand-holds feel good?
- Are there any unpleasant smells, glaring lights, or blaring audio systems?

VIS spoke with Lance Zarcone, Director of Maintenance for Capital District Transportation Authority in New York. VIS also spoke to Carm Basile, CDTA CEO, and Jaime Watson, CDTA Communications Director. CDTA has an intensive, successful maintenance program.

Year over year, the New York transit organization has had record-breaking ridership, going against the national trend. During the 2015-2016 fiscal year, CDTA recorded 17,106,322 boarding count, the third consecutive year of new records². Ridership has increased 25% since 2009³.

Part of the reason CDTA experiences exponential growth is the condition of their transit vehicles.

"Giving customers what they want is the secret to success. That includes clean and reliable service along a route network that is tailored to the needs of customers and our community. We must offer all of this while enhancing the customer experience with emerging technologies," Mr. Basile said.

"We are lucky to be bucking the national trend when it comes to ridership," Mr. Basile said.

"Making the system easy to understand has helped CDTA to grow ridership to record levels of 17 million trips annually. We are ahead of the curve with a ridership increase of more than 25% over the last seven years."

1: David Levinger & Maggie McGehee, "Responding to New Trends Through a Usability Approach," http://web1.ctaa.org/webmodules/webarticles/articlefiles/usability_approach.pdf

2: "CDTA Annual Report 2015-2016,"

https://www.cdfa.org/sites/default/files/source_files/cdfa_annual_report_2015-2016_final_august_31_layout_1.pdf

3: "CDTA Annual Reports," <https://www.cdfa.org/annual-report>



What Facilities Do Today to Improve Aesthetics

The most successful transit organizations across North America have a plan when it comes to working on their vehicles' appearance.

As Director of Maintenance, CDTA's Lance Zarcone knows his organization's procedures well.

"We have well trained staff, preventative maintenance and a successful fleet replacement plan," Mr. Zarcone said. "We perform a lot of preventative maintenance. 80% of our maintenance is scheduled."

"The customer experience starts the minute our buses pull up to the stop. Our bus fleet is modern and attractive, and we take that responsibility very seriously. We want the customer to enjoy their ride from the minute the bus picks them up until they reach their destination. We treat buses as our homes and want customers to feel like a guest in our home."

From working with many transit organizations in North America, VIS sees what works and what doesn't. For transit vehicles, aesthetics starts from the bottom up.

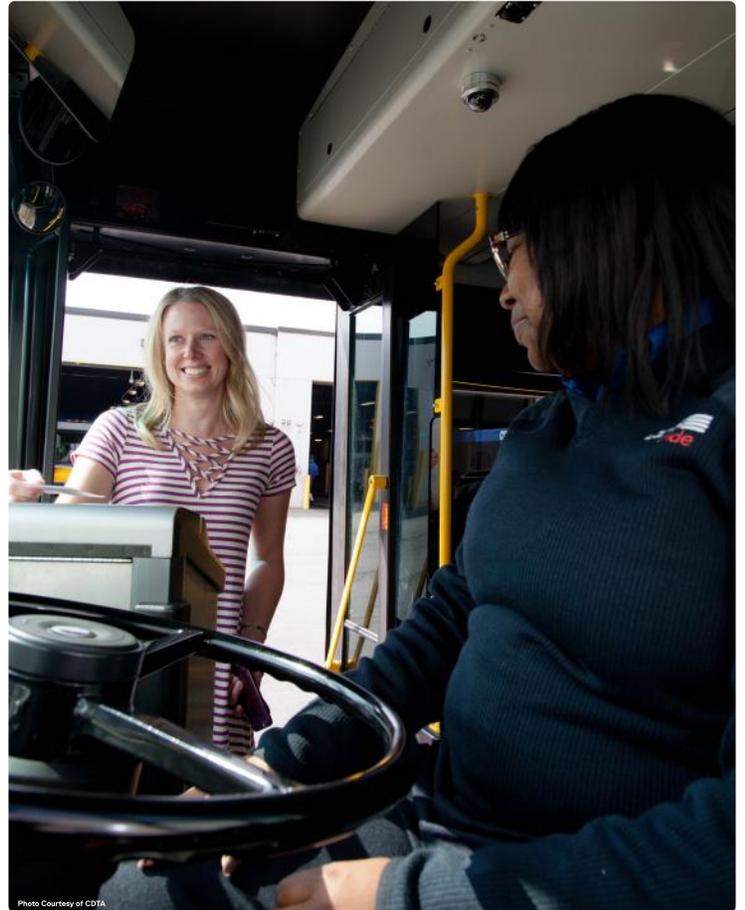


Photo Courtesy of CDTA



Photo Courtesy of CDTA

"VIS is seeing more fleets turn to automated wheel polishing for an exceptional return on investment," Mark Keegans, VIS Vice President, said. "This is a simple way to show you care about your fleet maintenance from the bottom up. With wheels going through sanding and polishing cycles in as little as 30 minutes, automated wheel polishing is a simple way to keep your buses in tip top shape."



Prominent Aesthetics Help the Bottom Line

Not only is it cheaper to invest in vehicle aesthetics relative to other investments, but you are more likely to attract a younger audience that needs a way to get around. This, in turn, helps your system make profits instead of losses.

In 'Increasing Bus Transit Ridership Through Technology and Aesthetic Innovations', the authors point to new tech as a way to maximize ridership. The authors say, "encouraging ridership through innovation and technology may be just the approach to attract the demographics that are on the brink of using transit ridership."¹

Cleaner wheels can translate to higher rider numbers. Additionally, clean wheels can't hide any cracks or damage.

If your wheels are caked with dirt and rarely cleaned, the public may assume that you don't prioritize maintenance and safety.

"A clean vehicle and polished wheels gives customers the impression of quality," Mark Keegans said. "Clean wheels speak to an organization that cares about equipment and vehicle maintenance. In turn, your system will maximize ridership and profits."

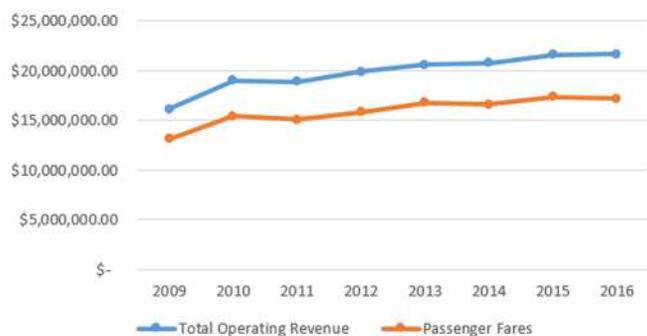
A clean fleet is a safe fleet. Preventative maintenance is generally much cheaper and quicker than reactive maintenance. It's important to clean your vehicle, including wheels, on a regular schedule.

In addition to being safe, a clean fleet generally has lower fuel costs.

According to 'Best Operational and Maintenance Practices for City Bus Fleets to Maximize Fuel Economy', "Fuel costs can be reduced by improving the driving style of bus drivers and through sound maintenance practices. Well-maintained buses that are properly tuned and adjusted tend to be cleaner, safer and consume less fuel than poorly maintained vehicles."²

When your fleet is clean and safe, ridership numbers go up. Since 2009, CDTA has experienced 34% growth in total operating revenue, a 31% increase in passenger fare revenue, and 21% increase in total revenue.

CDTA Revenue from 2009-2016



1: Kenneth E. Liwag, "Increasing Bus Transit Ridership Through Technology and Aesthetic Innovations," https://smartech.gatech.edu/bitstream/handle/1853/40792/KennethLiwag_Increasing%20Bus%20Transit%20Ridership.pdf
2: "Best Operational and Maintenance Practices for City Bus Fleets to Maximize Fuel Economy," https://www.esmap.org/sites/default/files/esmap-files/FINAL_EECI-BusGuideNote_BN010-11.pdf
3: "CDTA Annual Reports," <https://www.cdfa.org/annual-report>



Enhancing the Customer Experience

Your product is only as good as the customer is willing to pay for it. In an era of lowering fares to attract more customers, transit systems that are successful invest in the aesthetics of their fleets. To avoid slashing fares, you need to improve appearance.

“Overall appearance is very important to us,” CDTA’s Mr. Zarcone said. “It’s my belief that an attractive, clean bus is perceived to be a safe bus.”

For CDTA, aesthetics is one large part of the overall customer experience, for riders and those considering giving transit a try.

“We want to be vitally important to the entire community, not just our customers who ride with us daily,” Mr. Basile said. “While some people may not access our services, their belief in our ability to operate a first-class transportation network is important. We look to provide value whether through affordable fares, innovative programs, or supporting community needs. It is a full 360-degree effort. We have focused on working with large employers and growing a wider array of services that provide access to work, recreation and more. By working with all sectors of the region’s business we are able to proactively generate more options that will entice customers to give transit a try.”

In ‘Improving the Customer Experience’, the authors say, “Customer perception of transit service is traditionally informed by the agencies’ ability to run trains and buses frequently, on time and without disruption. Today more than ever, transit agencies are striving to provide more than this basic service; they aim to grow and diversify their customer base by providing a convenient, attractive and comfortable transit experience—so good, in fact, that transit then becomes the first choice for travel.”¹



The authors continue, “The quality of transit vehicles, including exterior appearance, cleanliness, interior layout, seating, displays and audio, can have an important effect on the quality of a customer’s experience.”

1: “Improving the Customer Experience,” <http://transitleadership.org/docs/TLS-WP-Improving-the-Customer-Experience.pdf>

Keeping Wheels Clean & Our Solution

Per 'Transit Bus Service Line and Cleaning Functions,' "Wheels can be difficult to clean for several reasons. Many transit agencies paint bus wheels white, which easily shows brake dust, grease and road dirt that gets 'baked' onto the wheel by brake and road heat. Some have painted bus wheels black or other colors to make the accumulation of dirt less noticeable. Others have changed to aluminum wheels. In addition to reducing weight and dissipating brake heat, those who use aluminum wheels claim they are easier to keep clean."



The authors continue, "Transit agencies have experimented with several types of automated wheel cleaning equipment. Others send their wheels out to be stripped (i.e., sand blasted) and painted with polyurethane-based paints to ensure their appearance. Those who constantly paint bus wheels to maintain a clean appearance should be aware that a buildup of paint on the wheels can cause lug nuts to come loose."

The best way to ensure consistency is through automation.

We know that many major transit systems have a busy staff and limited budget. You probably don't have time to look for reliable wheel polishers and supervise them.

VIS developed the VIS-Polish automated wheel polishing system for consistent results every time. A simple sanding cycle will reveal hidden cracks or imperfections on a wheel that could lead to failure.

"The VIS-Polish was the final solution to enhance our fleet appearance," CDTA's Director of Maintenance Mr. Zarccone said. "Prior to the VIS-Polish we were able to paint, clean, make the buses look new again, but we were always challenged with our wheel appearance. I would absolutely recommend other transit organizations invest in the VIS-Polish. If any transit organization is really serious about fleet appearance, the VIS-Polish is a must."

ABOUT VIS

For more than 20 years, VIS has been the frontrunner for wheel-end safety equipment for the commercial trucking industry.

For a free fleet assessment, call VIS at 866-847-8721. To learn more please visit VISPolish.com.

1: 'Transit Bus Service Line and Cleaning Functions': <http://onlinepubs.trb.org/onlinepubs/tcrp/tsyn12.pdf>

